

What is claimed is:

1. A method for identifying a flow, including:
 - receiving a request from a host for a flow identifier;
 - sending a flow identifier to the host; and
 - receiving a packet with the flow identifier as the address.
2. The method of claim 1, wherein the address is a source address.
3. The method of claim 1, wherein the address is a destination address.
4. The method of claim 1, wherein the flow identifier is an address of a virtual host.
5. The method of claim 1, wherein the destination address of the packet is the address of a virtual host.
6. The method of claim 1, wherein the source address of the packet is the address of a virtual host.
7. The method of claim 1, wherein the packet has an Ethernet packet header and an Ethernet payload, wherein the Ethernet header has an Ethernet source address and an Ethernet destination address, and wherein the flow identifier is the Ethernet source address.
8. The method of claim 1, wherein the packet has an Ethernet packet header and an Ethernet payload, wherein the Ethernet header has an Ethernet source address and an Ethernet destination address, and wherein the Ethernet source address is the address of a real host.
9. The method of claim 1, wherein the packet has an Ethernet packet header and an Ethernet payload, wherein the Ethernet header has an Ethernet source address and an Ethernet destination address, and wherein the Ethernet source address is the address of a virtual host.

1 16. The method of claim 13, wherein the first host address is a virtual host address, and the
2 second host address is the address of a real host.

1 17. The method of claim 13, further including:

2 changing the Ethernet source address of the packet to be equal to the first host
3 address;

4 changing the Ethernet destination address of the packet to be equal to the second
5 host address; and

6 sending the packet.

1 18. The method of claim 13, wherein the Ethernet payload has an Internet Protocol header
2 and an Internet Protocol payload, wherein the Internet Protocol header has an Internet
3 Protocol source address and an Internet Protocol destination address, and further
4 including:

5 determining a second host address from a packet forwarding table;

6 changing the Ethernet source address of the packet to the first host address;

7 changing the Ethernet destination address of the packet to the second host address;

8 and

9 sending the packet.

1 19. The method of claim 1, wherein an incoming packet that has a first host address as its
2 destination address arrives at a port having a first port identifier, and wherein a packet
3 forwarding table correlates the first host address with a second port identifier; and further
4 including rejecting the packet if the first port identifier is not equal to the second port
5 identifier.

1 20. The method of claim 1, wherein the Ethernet payload has an Internet Protocol header and
2 an Internet Protocol payload, wherein the Internet Protocol header has an Internet
3 Protocol source address and an Internet Protocol destination address, and further
4 including:

1 determining a plurality of forwarding host addresses from a packet forwarding
2 table;
3 changing the Ethernet source address of the packet to the first host address;
4 creating a copy of the packet for each forwarding host address;
5 changing the Ethernet destination address of each copy of the packet to a
6 forwarding host address; and
7 sending each copy of the packet.

1 21. The method of claim 20, wherein a forwarding host address is the address of a real host.

1 22. The method of claim 20, wherein a forwarding host address is a virtual host address.

004730-566990
1 ~~23.~~ A method for handling flows, including:
2 adding a virtual circuit flag to a packet; and
3 setting the value of the virtual circuit flag to indicate when the packet belongs to a flow
4 and requests that the flow recognized by the network.

1 24. The method of claim 23, further including:
2 determining if the virtual circuit flag indicates a flow; and
3 if the virtual circuit flag indicates a flow, then replacing the an address of the packet with
4 a host address.

1 25. The method of claim 24, wherein the source address of the packet is replaced with a host
2 address.

1 26. The method of claim 24, wherein the destination address of the packet is replaced with a
2 host address.

1 27. The method of claim 24, wherein the host address is the address of a real host.

1 28. The method of claim 24, wherein the host address is a virtual host address.

